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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,295	08/23/2006	Yoshihiro Murakami	294884US0PCT	6991

22850 7590 08/12/2010  
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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PERREIRA, MELISSA JEAN

ART UNIT	PAPER NUMBER
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1618

NOTIFICATION DATE	DELIVERY MODE
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08/12/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/590,295	<b>Applicant(s)</b> MURAKAMI ET AL.	
	<b>Examiner</b> MELISSA PERREIRA	<b>Art Unit</b> 1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 2,5-7 and 9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,5-7 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/3/10</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Claims 2,5-7 and 9 are pending in the application. Claims 1,3,4 and 8 were canceled and claim 9 newly added in the amendment filed 8/3/10. Any objections and/or rejections from previous office actions that have not been reiterated in this office action are obviated.

#### ***Information Disclosure Statement***

1. The information disclosure statement filed 8/3/10 is acknowledged.

#### ***Response to Arguments***

2. Applicant's arguments filed 8/3/10 have been fully considered but they are not persuasive.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

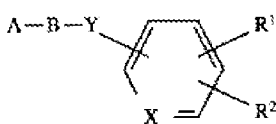
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2,5-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeGrado et al. (US 5,879,657) in view of Katano et al. (US 5,594,004) as stated in the office action mailed 5/13/10. The rejection is modified to include the newly added claim 9.

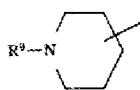
Art Unit: 1618

5. Applicant asserts that neither DeGrado et al. nor Katano et al. sufficiently disclose or suggest a compound of formula (IV) in the claimed invention.

6. Katano et al. teaches of the compounds of formula (I)



(I)

A represents  wherein  $R^9$

represents hydrogen, etc.; B represents  $C_{2-6}$  alkenylene, etc.; Y represents

$-(CO)_k-N(R^5)-Z-$  wherein  $R^5$  is lower alkyl, etc., k is 0 or 1, Z is  $-(CH_2)_m-CO-$ , etc. and m is 1-3; X represents CH, etc.;  $R^1$  and  $R^2$  represent  $-W-(CH_2)_i-COOR^3$  wherein W is O; i is 1-4 and  $R^3$  is hydrogen, etc. (all of column 2; column 3, lines 1-32). The compound of formula (I) encompasses the compound of formula (IV) of the instant claims.

7. Applicant asserts that the disclosure of DeGrado et al. only exemplified the radionuclides  $^{125}I$ ,  $^{99m}Tc$  and  $^{111}In$ , which are not positron-emitting radionuclides and are detected by SPECT.

8. DeGrado et al. teaches of the radiolabeled cyclic compounds which act as antagonists of the platelet glycoprotein IIb/IIIa complex. The radiolabel may be  $^{11}C$ ,  $^{18}F$ , etc. and allows for the radiolabeled cyclic compounds to be used as imaging agents for the method of diagnosing arterial and venous thrombi. Once the radiolabeled compounds are administered, the presence of thrombi may be visualized using a standard radioscinotographic imaging system, such as PET, SPECT, etc. (DeGrado et al. column 61, lines 29+; column 203, lines 34-61).

9. Applicant asserts that the contrast medium for thrombus of the present invention is demonstrated to specifically bind to the thrombus.

Art Unit: 1618

10. The compounds of Katano et al. are GPIIb/IIIa antagonists and are used for inhibiting the aggregation of platelets and for the treatment of thrombotic disease.

11. The compounds of DeGrado et al. are used for imaging venous thrombi via PET and are antagonists of platelet glycoprotein IIb/IIIa.

12. Thus, the compound of the combined disclosures inhibits the GPIIb/IIIa receptor on the surface of the platelets of a thrombus and the compound of the combined disclosures encompasses the compound of the instant claims and is capable of the same functions and has the same properties.

13. Applicant asserts that the "evidence of unobvious or unexpected advantageous properties, such as superiority in a property the claimed compound shares with the prior art, can rebut prima facie obviousness. "Evidence that a compound is unexpectedly superior in one of a spectrum of common properties.... can be enough to rebut a prima facie case of obviousness."

14. The compound of the combined disclosures encompasses the compound of the instant claims and is capable of the same functions and has the same properties.

15. MPEP 716.01(a) [R-2] Objective Evidence of Nonobviousness

OBJECTIVE EVIDENCE MUST BE CONSIDERED WHEN TIMELY PRESENT

Affidavits or declarations, when timely presented, containing evidence of criticality or unexpected results, commercial success, long-felt but unsolved needs, failure of others, skepticism of experts, etc., must be considered by the examiner in determining the issue of obviousness of claims for patentability under 35 U.S.C. 103.

16. ATTORNEY ARGUMENTS CANNOT TAKE THE PLACE OF EVIDENCE

Art Unit: 1618

The arguments of counsel cannot take the place of evidence in the record. In *re* Schulze, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965). Examples of attorney statements which are not evidence and which must be supported by an appropriate affidavit or declaration include statements regarding unexpected results, commercial success, solution of a long-felt need, inoperability of the prior art, invention before the date of the reference, and allegations that the author(s) of the prior art derived the disclosed subject matter from the applicant.

### ***Conclusion***

17. No claims are allowed at this time.

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 1618

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELISSA PERREIRA whose telephone number is (571)272-1354. The examiner can normally be reached on 9am-5pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Hartley can be reached on 571-272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael G. Hartley/  
Supervisory Patent Examiner, Art Unit 1618

/Melissa Perreira/  
Examiner, Art Unit 1618